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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/517,030      | 12/07/2004  | Takeshi Oouchida     | 1018.126101         | 2771             |

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EXAMINER

LOPEZ, FRANK D

ART UNIT PAPER NUMBER

3745

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/517,030 | <b>Applicant(s)</b><br>OOUCHIDA ET AL. |  |
|                              | <b>Examiner</b><br>F. Daniel Lopez   | <b>Art Unit</b><br>3745                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/7/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Claim Rejections - 35 USC § 112***

Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 2-5, claim 7 line 2-7, and claim 13 line 14, and claim 2, 8 and 14 line 3 "both sides" should be --each side--, since a bearing can not be on both sides at the same time. In claim 1 and 13 line 2-8 and claim 7 line 3-7 claim "a swash plate, which the first plunger abuts on,...a (second) swash plate, which the second plunger abuts on,...wherein formed in the cylinder block are first and second plunger holes that contain the first and second plungers, respectively" or a variation therein. This is confusing, since a slipper, connected to each of the plungers, abuts the swash plate, rather than the plunger itself.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, and 13-18, inasmuch as they are definite, are rejected under 35 U.S.C. § 102(b) as being anticipated by Hayashi et al. Hayashi et al discloses a hydrostatic transmission with a combined thrust and radial bearing (6, 16) and a radial bearing (7, 3) supporting a shaft (2) at each end of a cylinder block (4), with each group of combined thrust and radial bearing and a radial bearing being supported by a single (integrated) member (8; 1, 15, respectively). Claims 6 and 18 have product by process type limitations, which limitation are defined by the resulting structure. Second swash plate 8 appears to meet the limitations of claims 6 and 18.

Claims 7-12 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Hayashi et al. Hayashi et al discloses all the elements of claims 7-12, as discussed in the above rejection, including that the drive system includes the hydrostatic transmission connected between an engine and a drive unit for a vehicle (e.g. column 10 line 62-65); that the hydrostatic transmission does not allow power from the engine to be disconnected from the drive unit (e.g. column 17 line 59-67); and that the drive unit is a device which inputs turning force from the second swash plate of the second hydraulic system and outputs rotation in a direction identical or reverse of to that of the second swash plate; but does not disclose that there is a device for transmitting or shutting down power to the shaft.

Drive systems for vehicles include clutches between an engine and a transmission, allowing power to be transmitted to or shutting off power through the transmission, to the drive unit. Therefore, inherently, the drive system of Hayashi et al would include a clutch between an engine and a transmission, allowing power to be transmitted to or shutting off power through the transmission, to the drive unit; since the hydrostatic transmission can not do this. If not, it would have been obvious at the time the invention was made to one having ordinary skill in the art to include a clutch between the engine and the hydrostatic transmission of Hayashi et al, allowing power to be transmitted to or shutting off power to the transmission; as a matter of engineering expediency. Since the clutch allows or stops power to the transmission, it allows or stops power to the shaft.

Claims 13-15, 17 and 18, inasmuch as they are definite, are rejected under 35 U.S.C. § 102(b) as being anticipated by Japan 2002-31209. Claim 13 claims a "means for supporting the shaft on both sides of the cylinder block" is not considered a proper 112 6<sup>th</sup> paragraph, means plus function limitation, since the portion "on both sides of the cylinder block" is a limitation to a specific element. Note that even if the limitation of claim 13 is considered a proper 112 6<sup>th</sup> paragraph, means plus function limitation, claim 14 line 1-2 "said means includes a bearing" is not a proper 112 6<sup>th</sup> paragraph, means

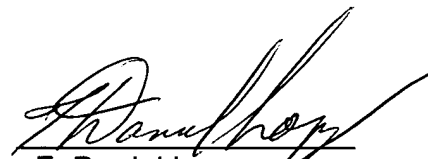
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plus function limitation. Japan 2002-31209 discloses a bearing (16, 41) supporting a shaft (15) at each end of a cylinder block (25).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', with a long horizontal stroke extending to the right.

F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
March 13, 2006